DOCUMENT RESUME

ED 157 634 PS 010 063

AUTHOR Carter, Bernardita Yarur
TITLE Mainstreaming: The Effects on Social Interaction Among Preschoolers.
PUB DATE [77]
NOTE 20p.

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS Educational Experiments; Handicapped Children; *Interaction Process Analysis; *Mainstreaming; *Peer Acceptance; *Preschool Children; Preschool Education; Research; Social Behavior; *Social Relations; *Sociometric Techniques

ABSTRACT

This study determined the sociometric status of "referred" children (with emotional and/or learning problems) and "stable" children enrolled in a mainstreamed preschool program in an effort to determine whether mainstreaming affects the social interaction among preschoolers functioning at different developmental levels. Two separate experiments were conducted. In the first, 16 preschoolers (7 referred and 9 stable) were interviewed individually on two consecutive school days. Individual pictures of each child arranged randomly on a bulletin board were used in conjunction with a questionnaire to determine the sociometric status of each child (the child pointed to individual pictures of one or more children in response to the interviewers questions). In the second experiment, the subjects were the same preschoolers plus two new children (8 referred and 10 stable). The choice of classmate of each child was recorded turn chose a classmate to line up with for outdoor play). The degree of cross-group interaction and acceptance/rejection level was determined by an analysis of the choices of the first five children of each day. The results of both experiments supported the hypothesis that cross-group social interaction does exist among mainstreamed preschoolers functioning at different levels. Social acceptance or rejection of the child apparently was not due to his/her developmental level, but to the interaction of other variables. (CM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED157634

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Mainstreaming: The Effects on Social Interaction among Preschoolers

Bernardita Yarur Carter

North Carolina State University

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Bernardita Yarur Carter

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC) AND USERS OF THE ERIC SYSTEM."

PS 010063

Running head: Mainstreaming: The Effects on Social Interaction

Abstract

This study determined the sociometric status of children with identifiable problems and children with unidentifiable problems enrolled in the same preschool program. Two seprarate experiments were conducted hypothesizing that at the preschool level there exists cross-group social interaction among mainstreamed preschoolers functioning at different developmental levels. This hypothesis was supported in both experiments. Social acceptance or rejection of the child was not due to his/her developmental level but to the interaction of some other variables.

Mainstreaming: The Effects on Social Interaction among Preschoolers

There are about 8 million school-aged children in the U.S.A. who are emotionally, physically or mentally handicapped and thus require special education and services. Congress according to Klein (1975) defined handicapped children as:

> Mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled or other health impaired children who by reason thereof require special education and related services (p. 317).

According to the U.S. Office of Education, 45% of these children today are denied special services and a basic education (Lance, 1976) even-though it has been nearly two years since Education of All Handicapped Act of 1975, P.L. 94-142 was passed by Congress (Report from Washington, 1976). P.L. 94-142 assures that all handicapped children from 3-21 years of age receive not only a free public education but an appropriate one in the least restrictive environment, that is, handicapped children should be educated with nonhandicapped children to the maximum extent possible. Educating children in this fashion is known as "mainstreaming." Mainstreaming According to Monaco (1976) is:

> Putting handicapped children back in the regular classroom

> for selected experiences. It is, more strictly 1) an attitudinal system that reinforces the position that all children can learn when attention is given to individual learning styles, learning rates, and varied content; 2) a management system that allows for optional routes to goal achievement; 3) an organizational support system that provides for the educational needs of all children. Effective mainstreaming addresses the academic and social needs of all youngsters in the least restrictive educational environment (p. 11).

This new concept in education involves a move from self-contained programs to partial or full time integration into regular classes with special services provided by trained personnel. The integration of handicapped and nonhandicapped children, however, has existed for many years, especially in nursery schools, but the integration has been minimal until P.L. 94-142 became law in 1975. The previous minimal use of mainstreaming is a direct result of the belief and supportive research that the "special child" will benefit more socially and academically when separated from the "normal" peers (Johnson, 1950; Johnson & Kirk, 1950; and Baldwin, 1958).

There have been a number of studies on the social acceptance of mentally retarded (Baldwin, 1958; Goodman, Gottlieb & Harrison, 1972; and Iano, Ayer, Heller, McGettigan & Walker, 1974) and handicapped (John-

son, 1950; and Johnson & Kirk, 1950) children in the elementary grades. These studies reported that "special" children are socially rejected and isolated by their normal peers, that is, there is little cross-group interaction. The author found only two sociometric studies that dealt with preschoolers (Feitelson, Weintraub & Michaeli, 1972; and Petterson, Petterson & Scriven, 1977). Feitelson et al. (1972) studied the social interaction between disadvantaged and privileged preschool children in Israel. Disadvantaged children were those whose parents were of Middle Eastern or North African origen where neither parent had completed more than an elementary education (8 years) and the provider had a semi-skilled or unskilled occupation. The privileged children came from parents of European origin who had a secondary or beyond educational level and the provider had a professional occupation. Feitelson et al. (1972) found little cross-group interaction. Their results support the previous studies with elementary children. A study by Petterson et al. (1977) studied the amount of peer imitation between handicapped (children who showed serious delays in development) and nonhandicapped preschoolers. Although the study dealt primarily with peer imitation, Petterson et al. (1977) gave the children a sociometric questionnaire to determine if peer imitation was due to social popularity. Their findings in the sociometric questionnaire were that there was no difference in peer acceptance and both handicapped and nonhandicapped chil-

dren were equally popular. This is the only sociometric study that the author was able to find that dealt with handicapped preschoolers. However Petterson et al. (1977) sociometric findings have to be interpreted with caution because their study dealt almost entirely with the amount of peer imitation between handicapped and nonhandicapped preschoolers, not with social cross-group interaction. Also they do not describe the sociometric instrument used nor do they report specific statistical results to support their sociometric findings.

Since most sociometric studies to date have shown that mainstreamed children in the elementary grades prefer to interact socially with peers functioning at same developmental level, can we assume the same results for preschoolers? The purpose of this study is to try to answer this question by determining whether mainstreaming affects the social interaction among preschoolers functioning at different developmental levels. From the author's personal experience working with mainstreamed preschoolers and Petterson et al. (1977) sociometric findings, the author intends to demonstrate that at the preschool level social interaction is not due to differential developmental level but to the interaction of some other variables. Specifically then, the hypothesis is that there exist cross-group social interaction among mainstreamed preschoolers functioning at different developmental levels.

Experiment 1

Method

Subjects. The subjects were 16 preschoolers (9 males and 7 females) ages 3½ - 5½ enrolled in a preschool program in Raleigh, N.C. where mainstreaming is utilized. There were 7 "referred" (3 females and 4 males) and 9 "stable" children (5 males and 4 females). Referred children are children who have been referred to the preschool because they have emotional and/or learning problems. Stable children are children with no problem history who attend the program for a preschool education.

Procedure. Individual color pictures of each child were taken with a Kodax Tele-Instamatic camera. These pictures were arranged randomly on a bulletin board which in conjunction with a sociometric questionnaire was used to determine the sociometric status of each child. The reason for taking and using pictures in conjunction with the questionnaire was to minimize confounded results that could have resulted from such factors as a child's developmental level, ability to recall names, and ability to verbalize. The sociometric status of each child was obtained by administering one individual interview to each subject during the school day, three weeks after the school year had began on two consecutive days. Each subject was shown the bulletin board of pictures and asked to point to his/her picture. Then she/he was asked to point to the pictures of one or more children in response to the following questions:

1. Point to the three children you like to play with during "free play"* time in school.
2. Point to the three children you do not like to play with during "free play" time in school.
3. Point to the three children from your class you would not invite to your house to play with if Mommy said you could.
4. Point to the three children from your class you would invite to your house to play with if Mommy said you could.
5. Point to the children from your class that you like.
6. Point to the children from your class that you do not like.

Each question was repeated twice to assure understanding by the child. This procedure was similar to that used by Johnson (1950) and Iano et al. (1974) to determine the sociometric status of children. Two scores -acceptance and rejection scores- were computed from the data to test the hypothesis. The acceptance score is the number of times each child was selected in response to questions 1,4 and 5. The rejection score is the number of times each child was selected in response to questions 2,3 and 6. Questions 1,2,3 and 4 required three responses per question per child. Questions 5 and 6 required at least one response per question per child. If a child gave more than one response for questions 5 and 6, the first choice only was used in the data. Then the mean for stable and referred children were obtained for acceptance and rejection

*"Free play" time refers to the time during the school day in which the children have the freedom to play anywhere in the classroom alone or with a friend.

to determine the group's sociometric status. A chi square was performed to determine whether or not a significant difference existed between the groups' acceptance and rejection scores.

Results

The acceptance and rejection findings for each child are presented in Table 1. The acceptance scores for referred children ranged from 2-15, a difference of 13 points; while their rejection scores ranged from 5-9, a difference of 4 points. The acceptance scores for stable children ranged from 3-10, a difference of 7 points; while their rejection scores ranged from 2-9, a difference of 7 points too.

Insert Table 1 about here

The mean score for acceptance and rejection for each group are presented in Table 2. The mean acceptance and rejection scores for stable children was 6.00 and 6.22 respectively, while the referred children mean was 6.86 and 6.86 respectively. As predicted, the results support the hypothesis that there is cross-group social interaction among mainstreamed preschoolers, $X^2(1) = .01$, $p > .01$.

Insert Table 2 about here

Experiment 2

Method

Subjects. The subjects were 18 preschoolers* (10 males and 8 females) ages 3½ - 5½ from the preschool program in experiment 1. There were 8 referred (3 females and 5 males) and 10 stable children (5 males and 5 females).

Procedure. The choice of classmate of each child was recorded during "choosing" time in school for 18 consecutive school days, three weeks after the school year had began. "Choosing" time is the time before going to play outside in which all the children sit down in a circle and wait to be chosen by "leader" or a friend already chosen. The "leader" is the child who is the first one to choose a classmate to line up to go play outside. Each day a different child is the leader until everyone gets a turn. The leader chooses one classmate who in turn chooses another and the sequence of each day was recorded by assigning a number one to the leader, a number two to the leader's choice, and so on until all children present have been chosen. To determine the degree of cross-group interaction and acceptance/rejection level, the choices of the first five children**of each day were used by calculating the total number of times:

1. a stable child chose a referred child
2. a referred child chose a stable child

*The difference in number of subjects from experiment 1 was due to the arrival of two new children during experiment 2.

**The choices of the first five children were used because as the sequence of choosing progressed the choides decreased.

3. a stable child chose a stable child

4. a referred child chose a referred child

Four scores were obtained from the data (stable-referred, referred-stable, stable-stable, referred-referred) to which a chi square was performed to determine whether or not a significant difference existed between the four groups' scores.

Results

The overall findings for the first five children chosen are presented in Table 3. The stable-stable group got a choosing frequency of 38, the highest from the four groups. The stable-referred group got a choosing frequency of 14; the referred-stable group a choosing frequency of 12; and the referred-referred group a choosing frequency of 7. Even-though stable children chose stable children 24 times more than referred children, the results support the hypothesis that there is social interaction among mainstreamed preschool children functioning at different developmental levels, $X^2(1) = .66$, $p > .01$. The ratio of absent children per day for stable and referred children was 1:1, thus the ratio of stable-referred during this experiment remained the same throughout.

Insert Table 3 about here

Discussion

This study determined the sociometric status of referred and stable children enrolled in a preschool program in Raleigh, N.C. where mainstreaming is utilized. The findings from both experiments support the hypothesis that there is cross-group social interaction among mainstreamed preschoolers functioning at different developmental levels. The first experiment was conducted during the school day in which individual pictures of each child arranged randomly on a bulletin board together with a sociometric questionnaire were used to determine the sociometric status of each child. Pictures were used to minimize confounding variables such as a child's developmental level, ability to recall names and ability to verbalize. In this experiment, referred children were accepted slightly more than stable schildren eventhough there were fewer referred children. In contrast, referred children were rejected slightly more than stable children. This difference in means, however, in both acceptance and rejection levels were statistically significant enough to conclude that peer acceptance at the preschool level is not influenced by the child's developmental level but by the interaction of other variables.

The second experiment was also conducted during the school day in which the daily "choosing" sequence was recorded. This experiment's findings showed a greater difference in the number of times stable chil-

dren chose stable rather than referred children which would lead one to conclude that there is no significant cross-group interaction. However when a chi square was performed the results supported the hypothesis and were significant enough, at the .01 level, to conclude that social interaction among mainstreamed preschool children functioning at different developmental levels exists.

Although the experiments in this study were conducted only once and in one setting and with a limited population of preschoolers, the results obtained in both experiments support mainstreaming at the preschool level and the need for additional research in this area. It would be interesting to find out what is the relationship between sex and the degree of acceptance and/or rejection among mainstreamed preschoolers. By looing casually at the raw data obtained from experiment 1, there seems to be evidence that there is minimal cross-sex interaction. Also more research is needed to determine the variables that interact and influence the acceptance or rejection of peers at the preschool level. Some of these variables can be the physical appearance of the child, the sex of the child, the ethnic or racial background of the child, the socio-economic background of the child, and so on.

With the enactment of P.L. 94-142 which assures that all handicapped children from 3-21 years of age receive a free and appropriate education in the least restrictive environment, schools and agencies are responsi-

ble for:

1. child identification from birth to school age by screening everyone in the school population.
2. "full service" time-table which outlines the agency's goals to comply with P.L. 94-142.
3. "due process" which are a series of procedural steps that assures the child's and his/her parents'right and confidentiality in carrying on the program.
4. maintenance of program by providing funds for regular and special education teachers for further education.
5. non-discriminatory testing, that is, culture-free tests for the screening of children.
6. free and appropriate services for all children with no cost to parents or guardians.

If the school or agency fails to comply with the implications of P.L. 94-142, no federal funds will be provided to it. Therefore, the education assured by P.L. 94-142 known as mainstreaming requires the coordination of programs and willingness of agencies to carry them on. If mainstreaming is effectively carried on and shown to be effective by additional future researchs, it might help society as a whole to better accept handicapped children and for a smoother integration of these children into society at an earlier age.

References

Baldwin, W. K. The Social Position of the Educable Mentally Retarded Child in the Regular Grades in the Public Schools. Exceptional Children, 1958, 25, 106-108; 112.

Feitelson, D., Weintraub, S. & Michaeli, O. Social Interaction in Heterogeneous Preschools in Israel. Child Development, 1972, 43, 1249-1259.

Goodman, H., Gottlieb, J. & Harrison, R. H. Social Acceptance of EMRs Integrated into a Non-graded Elementary School. American Journal of Mental Deficiency, 1972, 76, 412-417.

Iano, R. P., Ayer, D., Heller, H. B., McGettigan, J. G. & Walker, V. S. Sociometric Status of Retarded Children in an Integrative Program. Exceptional Children, 1974, 40, 267-271.

Johnson, G. O. A Study of the Social Position of Mentally Handicapped Children in the Regular Grades. American Journal of Mental Deficiency, 1950, 55, 60-89.

Johnson, G. O. & Kirk, S. A. Are Mentally Handicapped Children Segregated in the Regular Grades? Exceptional Children, 1950, 17, 65-68; 87-88.

Klein, J. W. Mainstreaming the Preschooler. Young Child, July 1975, 30, 317-326.

Lance, W. D. What You Should Know About P.L. 94-142. Audiovisual Instruction, December 1976, 21 (10), 14-15.

Monaco, T. Mainstreaming, Who? Science and Children, March 1976, 13 (6), 11.

Petterson, C., Petterson, J. & Scriven, G. Peer Imitation by Nonhandicapped and Handicapped Preschoolers. Exceptional Children, January 1977, 43, 223-224.

Report from Washington: U.S. Raising the Stakes on Aid to Handicapped. Compact, February 1976, 10 (1), 10-12.

Table 1

Individual Acceptance and Rejection Scores:

Experiment 1

	Subjects Number	Scores	
		Acceptance	Rejection
Referred n=7			
	3	4	5
	4	2	8
	5	15	5
	6	14	8
	7	3	9
	11	7	7
	13	3	6
Stable n=9			
	1	5	9
	2	7	6
	8	3	7
	9	8	9
	10	10	5
	12	4	4
	14	5	8
	15	9	2
	16	3	5

Table 2

Group Mean Acceptance and Rejection Scores:

Experiment 1

Subjects	Mean Scores	
	Acceptance	Rejection
Stable n=9	6.00	6.22
Referred n=7	6.86	6.86

$x^2(1) = .01$, $p > .01$.

Table 3

Inter-Group Frequency Data:

Experiment 2

		Chosen	
		Stable	Referred
Chooser	Stable	38	14
	Referred	12	7

$x^2(1) = .66$, $p > .01$.